



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

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SECRETARY

**MEMORANDUM TO:** Project Engineers  
Project Design Engineers

**FROM:** W. J. Rogers, P. E.  
State Bridge Design Engineer

**DATE:** October 1, 1997

**SUBJECT:** Economical Plate Girder Design

Due to the methods used to fabricate plate girders, it is far more economical to design a field section with uniform width flanges and vary the thickness at section change points. If the designer uses a constant flange width in a given field section, the fabricator can order wide plates of 2 or 3 different thicknesses and make 1 or 2 transverse butt splices. He can then cut the prewelded pieces longitudinally to the appropriate widths for flanges, see attachment.

Effective with new plans, flange widths in plate girder field sections shall be kept uniform where practical.

The Design Manual will be revised at a later date to reflect this policy.

WJR/CTR/ap

cc: T. V. Rountree, P. E.

N. M. Salmon, P. E.



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Last Updated: 8/11/98 by: Steven Rackley

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